

6. Josefa

Program Name: Josefa.java

Input File: josefa.dat

Josefa is on her high school's UIL computer science team. At this week's practice coach Snigglefritz taught the team how to convert a decimal value to an eight bit two's complement binary number. The process is easy enough but Josefa would like a program to help double check all of the practice problems coach has assigned. She would like to enter a decimal whole number, either positive or negative, and see the equivalent two's complement binary number so she can see if that matches the number she has calculated by hand.

Input: A number N that represents the number of whole numbers to be converted to two's complement binary numbers. N whole numbers X each on a separate line where $-128 \leq X \leq 127$.

Output: Each X and its eight bit two's complement equivalent separated by a space, =, and then another space. Each pair should be on a separate line.

Sample input:

```
4
15
-16
-49
72
```

Sample output:

```
15 = 00001111
-16 = 11110000
-49 = 11001111
72 = 01001000
```